

NEW AND INTERESTING PLANTS
FROM THE GREAT PLAINS

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As a result of field and herbarium studies, a number of new or interesting records of plants have been found for Kansas, Nebraska, South Dakota and Wyoming. A new form of *Sida spinosa* L. with white flowers that has been known in Kansas for several years is described. All specimens cited, unless indicated otherwise, are located at KANU.

Paspalum distichum L. KANSAS: NEOSHO CO.: 5 1/4 mi n Erie on US 59, edge of farm pond in water, 18 October 1970, *Holland* 2854. This represents an extension of the range of the species northward from Oklahoma.

Panicum philadelphicum Bernh. ex Trin. KANSAS: CHAUTAUQUA CO.: 2 mi se Sedan, sandy open scrub oak area, scattered to common, 2 October 1969, *McGregor* 20708. GREENWOOD CO.: 1 mi ne Fall River, sandy open oak wooded area, abundant in local area, 2 October 1969, *McGregor* 20691. This represents an extension of the range of the species northward from Oklahoma and westward from Missouri.

Andropogon intermedius R. Br. NEBRASKA: WEBSTER CO.: 2 mi s, 3 w Red Cloud, reseeded prairie, common, 11 August 1965, *McGregor* 19466. In Kansas this species is known from CLOUD CO.: 1 September 1952, *Fraser* 956, and REPUBLIC CO.: 10 September 1970, *McGregor* 23514. This species is widespread in tropical and subtropical areas of the Old World and is introduced in the United States.

Eleocharis quadrangulata (Michx.) R. & S. var. **crassior** Fern. KANSAS: BOURBON CO.: Bourbon Co. St. Lake No. 3, 1 mi e & 2 n of Hiattville, common along se side of lake, soggy area of shoreline over limestone, 7 August 1970, *Magrath & Weedon* 5750. COFFEY CO.: 6.5 mi n &

1.5 w of Westphalia, side of a large pond, muddy loam, three small clumps, 19 September 1970, *Magrath* 6250, NEOSHO CO.: 2 mi s & 2 w of St. Paul, muddy margin of pond in native meadow, 13 July 1965, *Holland* 1065.

Scirpus olneyi A. Gray. KANSAS: CHEROKEE CO.: 1.5 mi w, 0.5 s Baxter Springs, shallow water and muddy margin of pond, large colony, 17 July 1970, *Bare, Johnson & McGregor* 2530; 6 August 1970, *Magrath & Weedon* 5719 (duplicates determined by T. M. Koyama). This extends the range of the species northward from Texas and westward from Missouri where it is known only from Jefferson County.

Carex melanostachya M. B. ex Willd. KANSAS: DOUGLAS CO.: 0.5 mi n of Lone Star, roadside ditch, a few large colonies, 14 May 1964, *Kolstad* 1193; 25 May 1964, *Kolstad & Harms* 2150 (duplicates determined by F. J. Hermann); 24 May 1971, *Weedon* 6938. This is the first report of this species for North America. Komarov (1964) describes the habitat of this species as steppes, meadows and grassy places on saline soils, and gives its general distribution as Central Europe, the Mediterranean, Balkans, Asia Minor, Iran, Kulja, and the Caspian coast of the Caucasus.

Rumex stenophyllus Ledeb. NEBRASKA. BUFFALO CO.: 1 mi s of Elm Creek, sandy flood plain of the Platte River, 14 July 1968, *Bare, Johnson & McGregor* 1670. CUSTER CO.: 6.5 mi se Anselmo, prairie roadside bar ditch, in water, sandy soil, common, 20 July 1968, *Stephens & Brooks* 25182. DAWES CO.: 1.5 mi ne Crawford, wooded creek bank, wet sandy soil, weedy area, common, 14 July 1968, *Stephens & Brooks* 24637. DAWSON CO.: 2 mi s of Gothenburg, sandy flood plain of the Platte River, partially wooded, 14 July 1968, *Bare, McGregor & Johnson* 1594. GARDEN CO.: 1 mi s & 0.5 mi e of Lewellen, low wet prairie in the North Platte River valley, 13 July 1968, *Bare, McGregor & Johnson* 1443. GREELEY CO.: 10 mi w of Spalding, sandy banks of Cedar River, common, 28 Au-

gust 1967, *Bare & McGregor* 419. HARLAN CO.: 4 mi s of Alma, sandy area near lake, locally common, 30 August 1965, *McGregor* 19568. HOLT CO.: 8 mi s of O'Neill, wet roadside area, sandy soil, 13 July 1966, *Barker* 2968. HOOKER CO.: 16 mi w Mullen, low spot in sandhill prairie, moist sandy soil, several plants, all small, 27 August 1968, *Stephens* 28267. KEITH CO.: 0.5 mi s of Brule, bank of South Platte River, locally abundant, 28 August 1966, *McGregor* 20175. KIMBALL CO.: 6 mi w of Kimball, margin of lake, common in local area, 30 August 1966, *McGregor* 20269. LINCOLN CO.: 4 mi w of Sutherland, sandy banks of the Platte River, 14 July 1968, *Bare, Johnson & McGregor* 1542. SCOTTS BLUFF CO.: 0.5 mi n of Melbeta, bank of North Platte River, sandy soil with some white alkali present, 27 September 1968, *Weedon* 4776. SHERMAN CO.: 3 mi se Litchfield, bank of Beaver Creek, small colony, 2 September 1965, *McGregor* 19784. WEBSTER CO.: 4 mi w of Red Cloud, bank of the Republican River, large colony, 25 June 1953, *McGregor* 7545; 3 mi w of Red Cloud, 1 August 1964, *McGregor* 18676.

Polygonum sawatchense Small. NEBRASKA: SIOUX CO.: 6 mi nw Fort Robinson, open pine forested hillside, 24 June 1970, *McGregor* 22358. This is an extension of the range of the species southward from the Black Hills of South Dakota.

Suckleya suckleyana (Torr.) Rydb. KANSAS: CHEYENNE CO.: 0.5 mi w of St. Francis, sandy bank of river, locally common, 17 August 1971, *McGregor* 24027. HAMILTON CO.: 1 mi s of Syracuse, muddy bank of water hole, local colonies, 18 August 1971, *McGregor* 24091. KEARNY CO.: 3 mi ne Lakin, muddy shore of Lake McKinney, locally abundant, 18 August 1971, *McGregor* 24101. STAFFORD CO.: Quivira Natl. Wildlife Refuge, open areas in *Distichlis* flats, locally common, 19 August 1971, *McGregor* 24129.

Paronychia depressa Nutt. KANSAS: CHEYENNE CO.: 12 mi n St. Francis, rocky ledge, 9 June 1967, *Stephens*

11462. This is an extension of the range of the species southward from Nebraska and eastward from Colorado.

Stellaria aquatica (L.) Scopoli. KANSAS: DONIPHAN CO.: 1 mi n White Cloud, willow thicket, bank of Missouri River, several large colonies, 29 August 1970, *McGregor* 23467. This species is native to Europe. In North America it is known from Quebec and Ontario to North Carolina and Louisiana, also in British Columbia. It is not known from any of the states adjacent to Kansas.

Cerastium glomeratum Thuillier. KANSAS: CHEROKEE CO.: 6 mi e Baxter Springs, open rocky hillside, 13 April 1946, *McGregor* 2735. NEOSHO CO.: 9 mi n, 0.5 e Erie, pasture, 3 May 1965, *Holland* 876. In the central plains states this species has been reported from South Dakota, Illinois and Texas.

Draba lanceolata Royale. SOUTH DAKOTA: LAWRENCE CO.: 2 mi s, 8 w Walnut, Crooks Tower, top of peak, ca. 7180 ft, open woods, 12 August 1969, *Stephens* 35914. This is an extension eastward from the Rocky Mountains and Montana.

Alyssum desertorum Stapf. SOUTH DAKOTA: FALL RIVER CO.: 2.5 mi e, 1 s Oelrichs, flat prairie at Limestone Butte, dry rocky gravel soil, few plants, 20 May 1970, *Stephens* 38265. WYOMING: CROOK CO.: 17 mi s Sundance, open prairie hillside, dry rocky clay soil, few plants, 13 June 1970. WESTON CO.: 7 mi se Osage, flat prairie pasture, dry gravel clay soil, 12 June 1970, *Stephens & Brooks* 39597. This plant is known from collections in Oregon, Washington, Idaho and Montana. This is a weed introduced from the Old World, which is now spreading in North America.

Lesquerella gordonii (Gray) Wats. KANSAS: BARBER CO.: 4 mi s Sun City, gypsiferous soil, grassland, 6 May 1956, *Lathrop* 2249; 11 mi w Medicine Lodge, red soil, pasture, 2 June 1968, *Birkholz* 2241. CLARK CO.: 6 mi n Ashland, sandy soil, 28 April 1939, *Horr* E250; e of Clark Co. St.

Lake, grassland, dry sandy loam, common, 18 June 1951, *Horr* 3969. COMANCHE CO.: 4 mi se Coldwater, rocky level grassland, 28 April 1939, *Horr*, s.n.; 2 mi s of Coldwater, stationary sand dune bank, 28 May 1957, *Lathrop & McGregor* 3518. KIOWA CO.: 2 mi e, 3 n Belvidere, sandy grassland, common, 13 June 1951, *Horr & McGregor* 3808. MEADE CO.: 2 mi s, 1¼ e of Meade, overgrazed rocky pasture, common, 5 May 1957, *Horr* 4950; Meade Co. St. Park, sandy grassland, 16 June 1965, *Bare* 4. SEWARD CO.: 9 mi ne Liberal, sandy prairie, locally abundant, 27 April 1965, *McGregor* 19057. This is an extension of the range of the species northward from western Oklahoma.

Saxifraga occidentalis Wats. var. *occidentalis*. SOUTH DAKOTA: LAWRENCE CO.: 2.5 mi e, 5 n Savoy at Bridal Veil Falls, Spearfish Canyon, moist steep rocky bank, 22 June 1970, *Stephens* 40481. According to Hitchcock, *et al.* (1961), the nearest other localities are northwestern Wyoming and western Montana.

Croton capitatus Michx. NEBRASKA: SARPY CO.: 0.8 mi n & 3 w (on St. Spur N 150) & 2 s on N 50 of Louisville, loess over sandstone, dry roadside ditch, rare 27 September 1970, *Magrath* 6362. This extends the range of the species northward from Kansas.

Croton glandulosus L. var. *septentrionalis* Muell. NEBRASKA: ANTELOPE CO.: 1.4 mi nw of Clearwater on US 275, prairie roadside & railroad right-of-way, loam, extremely dry, one plant seen, 27 September 1970, *Magrath* 6390A. CASS CO.: 0.5 mi n Louisville, Louisville Park, flat area around small lake, dry sandy soil, abundant, 5 September 1970, *Stephens* 44634. These collections extend the range of the species northward from Kansas.

Croton monanthogynus Michx. NEBRASKA: ANTELOPE CO.: 1.5 mi w (on gravel rd) & 1.5 s & w (on paved rd) of Oakdale, dry roadside near oak woods, sandy loess,

scattered, 27 September 1970, *Magrath* 6381. FRANKLIN CO.: 1 mi w on N 4 & 1.5 s of Campbell, roadside ditch, dry loam, rare, 29 September 1970, *Magrath & Hays* 6472. PAWNEE CO.: 1 mi s, 5 e Burchard, weedy prairie pasture, dry rocky soil, 5 September 1967, *Stephens* 17523. RICHARDSON CO.: 1.4 mi e of Humboldt on N 4, roadcut & roadside ditch, rocky loam, common, 26 September 1970, *Magrath* 6335. SARPY CO.: 0.8 mi n & 3 w on St. Spur N 150 & 2 s of Louisville on N 50, loess over sandstone, roadside ditch, uncommon, 27 September 1970, *Magrath* 6363. THAYER CO.: 2 mi w of Chester on N 8, roadside ditch, loam, rare, 29 September 1970, *Magrath* 6481. WEBSTER CO.: 1.4 mi e of Webster-Franklin Co. line on N 4, disturbed area in an open prairie hay meadow, loam, rare, 29 September 1970, *Magrath & Hays* 6475. These collections extend the range of this species northward from Kansas.

Callitriche terrestris Raf. emend. Torr. KANSAS: MONTGOMERY CO.: 12 mi sw Independence, at Camp Wilderness, along damp draw in oak woods, 20 June 1970, *Holland* 2812c, in part. This is an extension of the range of the species westward from Missouri and northward from Oklahoma.

Anoda cristata (L.) Schlect. KANSAS: NEOSHO CO.: in South Mound, Lincoln Township, farmlot, 30 September 1970, *Holland* 2848. This species is native to South America and the southwestern United States. In the midwest, it is known to occur in Iowa and in McDonald Co., Missouri.

Sida spinosa L. f. *albiflora* Magrath, form. nov.

A forma *spinosa* differt petalis albis.

TYPE: KANSAS: DOUGLAS CO.: West campus of University of Kansas in Lawrence, growing along e edge of experimental greenhouse in loam soil, colony of 50-70 plants, 7 September 1970, *Magrath* 6147 (Holotype: KANU!). The white flowered plants were scattered in a large colony of plants that had typical yellow flowers.

This white flowered form of *S. spinosa* was first observed in this same area by Vernon Harms in 1962. Harms (1965) performed crossing studies on this taxon and concluded that the white flowered form represented a homozygous recessive condition for a single gene.

Hibiscus lasiocarpus Cav. KANSAS: BOURBON CO.: 1.5 mi e & 3 n of Hiattville, Bourbon Co. St. Lake, growing in marshy area along w side of lake, common, 25 August 1969, *Magrath* 4588; 7 August 1970, *Magrath & Weedon* 5746. CHEROKEE CO.: 2 mi s of Galena, in mixed woods of the flood plain woods of Shoal Creek, 5 August 1956, *Lathrop* 2863; 1 mi s of Riverton, low swampy area, abundant in local area, 12 August 1960, *McGregor* 15924; swampy area along Spring River, 26 August 1969, *Bare* 2169. The Bourbon Co. collections represent the first area in Kansas other than se Cherokee Co. where this species is known to occur.

Thymelaea passerina (L.) Cosson & Germ. KANSAS: CLOUD CO.: 1 mi n Concordia, flood-plain of Republican River, sandy soil, willow thicket, scattered, 11 September 1970, *McGregor* 23572. This species has been reported for North America from west-central Iowa, northeastern Nebraska and extreme western Nebraska. European manuals indicate that the species is a common weed in dry soils and appears commonly in grain fields of south and central Europe and western Asia.

Centunculus minimus L. KANSAS: MONTGOMERY CO.: 12 mi sw Independence, at Camp Wilderness, along damp draw in oak woods, 20 June 1970, *Holland* 2812c, in part. This represents an extension of the species westward from Missouri and northward from eastern Oklahoma.

Glaux maritima L. NEBRASKA: SIOUX CO.: n edge of Agate, flat prairie swale near Niobrara River, sandy soil, 16 August 1970, *Stephens* 43966. This species occurs in North Dakota, but is not known from South Dakota.

Sabatia campestris Nutt. f. **albiflora** D. M. Moore. KANSAS: CHEROKEE CO.: 0.4 mi w & 1 s of Baxter Springs, in prairie in soil over limestone, abandoned rock quarry area, 17 July 1969, *Johnson* 2259, in part. MONTGOMERY CO.: 2 mi s & 0.2 w of Sycamore, prairie hay meadow, sandy clay soil, rare, 12 July 1969, *Weedon & Magrath* 5516. WILSON CO.: 4.5 mi e Neodesha, sandy blue stem prairie, scattered, 4 July 1970, *McGregor* 22386.

Eustoma grandiflorum (Raf.) Shinnars f. **album** (Holzinger) Waterfall. KANSAS: RICE CO.: 0.5 mi s of Sterling, heavily grazed pasture, sandy soil, one plant seen, 9 August 1970, *Magrath & Weedon* 5754. STAFFORD CO.: T21S, R11W, Sec 21, found in dense *Spartina* area, very rare, 13 August 1958, *Ungar* 666a.

Apocynum medium Greene. KANSAS: DOUGLAS CO.: $\frac{1}{4}$ mi s of Lone Star, thin soil over limestone, abundant on old slope of roadcut, 11 June 1969, *Johnson* 2081; 14 June 1970, *Johnson* 2496. This extends the range of this species westward from Missouri.

Asclepias incarnata L. var. **incarnata** f. **albiflora** Heller. KANSAS: COFFEY CO.: 6.5 mi n & 1.5 w of Westphalia, growing near edge of large pond, moist loam, one plant, 5 September 1970, *Magrath* 6136. DOUGLAS CO.: in old roadbed at southern end of Baldwin Lake, 15 August 1961, *Richards* 3686; 1 mi s & 1.5 e of Baldwin City, growing at edge of lake, six plants, 19 August 1969, *Bare* 2114. NEBRASKA: DODGE CO.: Fremont Lakes Rec. Area, 3 mi w of Fremont on US 30, growing along se edge of lake, one white flowered plant in large colony of pink flowered plants, sandy loam, 21 August 1970, *Magrath* 5978.

Hydrophyllum appendiculatum Michx. NEBRASKA: DOUGLAS CO.: Omaha, wooded ravine s of Hummel Park, 6 June 1968, *Sutherland* 1689. This extends the range of this species northward from Kansas and northwestward from Missouri.

Scutellaria brittonii Porter. NEBRASKA: KIMBALL CO.: 2 mi w Kimball, upland prairie, dry sandy-gravel soil, 14 June 1967, *Stephens* 11664; 8 mi sw, 1.5 w Bushnell, open pine-prairie hilltop, dry rocky clay soil, few plants, 5 June 1969, *Stephens & Brooks* 31479; 29 June 1970, *Stephens & Brooks* 40859. This species also occurs in Wyoming, Colorado and New Mexico.

Leonurus marrubiastrum L. NEBRASKA: DOUGLAS CO.: 4 mi e of Venice on N 92, Elkhorn River, slip-off bank s of bridge, muddy silt with some sandy spots, rare, 21 August 1970, *Magrath* 5968. NEMAHA CO.: 8.1 mi s of Auburn on US 73 & 75, riverbed e of bridge, slip-off bank, silty-sandy clay, scattered, *Magrath* 5931. SOUTH DAKOTA: HUTCHINSON CO.: 0.5 mi e Olivet, bank of James River, moist sandy soil, abundant, 8 September 1970, *Stephens* 44866. This extends the range of the species northward from Kansas and northwestward from Missouri.

Lamium amplexicaule L. f. **albiflorum** D. M. Moore. KANSAS: DOUGLAS CO.: City of Lawrence, 2 blocks n of 23rd St. & 1 block e of Pennsylvania St., one plant, growing in pasture, loam, 30 April 1971, *W. & T. Vollmer*, s.n. COFFEY CO.: 1 mi n, 7 w on US 50 of Waverly, roadside park, growing in ditch, loam, uncommon, 22 May 1972, *Magrath* 7407.

Solanum sarrachoides Sendl. KANSAS: NEOSHO CO.: 4 mi s & 5 e Erie, in farmyard near fence rows, 29 September 1970, *Holland* 2840. This is a South American species that has been introduced into North America. It is known otherwise only from Jasper and McDonald Counties in Missouri and northeastern Oklahoma.

Mimulus alatus Ait. f. **albiflorus** House. KANSAS: FRANKLIN CO.: Ferndale, 1.5 mi s, 1 e & 1¼ s of Homewood, muddy creek floodplain near base of sandstone bluffs, one plant, 29 August 1970, *Magrath* 6125. LINN CO.: stream channel just n of Mound City, just e of bridge on K 7,

surfacing limestone, rare, 7 August 1970, *Weedon & Magrath* 6546.

Agalinis heterophylla (Nutt.) Small. KANSAS: CHAUTAUQUA CO.: 1.6 mi ne of Sedan, oak woods over sandstone, rare, 14 September 1970, *Magrath* 6224. CHEROKEE CO.: 2.1 mi w of Jct of US 166 & 69 on 166, 1.6 s & 0.2 e, abandoned rock quarry, rocky limestone soil, common, 14 September 1970, *Magrath* 6243; 1 mi w Baxter Springs, scattered in prairie, 3 October 1970, *McGregor* 23641. GREENWOOD CO.: 0.6 mi e of Sallyards on US 54, rocky prairie hay meadow, one plant found, 13 September 1970, *Magrath* 6201A. This extends the range of the species westward from Lawrence and Dunklin Counties in Missouri and northward from Oklahoma.

Orobanche multiflora Nutt. KANSAS: SCOTT CO.: 12 mi n & 3 w of Scott City, gravelly prairie hillsides with caliche outcrops, only one plant seen, 3 October 1970, *Bare* 2605. This extends the range of the species northward from Oklahoma and eastward from Colorado.

Triodanis biflora (R. & P.) Greene. NEBRASKA: JOHNSON CO.: 3.2 mi s of Cook on N 50, grazed pasture, loam, rare, 28 June 1970, *Magrath & Hays* 5639A. PAWNEE CO.: 0.6 mi s of Pawnee-Johnson Co. line on N 50, prairie hay meadow, in disturbed area, loam, rare, 28 June 1970, *Magrath & Hays* 5642. This is an extension northward of this species from Kansas.

Lobelia siphilitica L. var. *siphilitica* f. *albiflora* Britt. KANSAS: DOUGLAS CO.: 1.5 mi e of Lecompton, Kansas River bluff, moist ditch, 19 September 1968, *Bare* 1944.

Iva axillaris Pursh. KANSAS: FINNEY CO.: river bank, 18 July 1912, *Wilson & Miller*, s.n. HAMILTON CO.: 1 mi s, 1 e of Coolidge, prairie roadside right-of-way, moist sandy soil, locally abundant, area 25 ft. across, 3 August 1971, *Stephens* 50368. These are extensions of the range of this species southward from Nebraska and eastward from Colorado.

Helianthus mollis Lam. NEBRASKA: RICHARDSON CO.: 1.4 mi e of Humboldt on N 4, prairie pasture, loam, uncommon, 26 September 1970, *Magrath* 6336A. WEBSTER CO.: 2 mi s, 3 w Red Cloud, sandy prairie hillside, rare in the area, 11 August 1965, *McGregor* 19479. This is an extension of the range of the species northward from Kansas.

Bidens comosa (Gray) Wieg. WYOMING: GOSHEN CO.: side channel of North Platte River w of city park in Torrington, sandy to clay loam soil, scattered, 28 September 1968, *Weedon* 4787; North Platte River on s edge of Torrington, both banks of river, sandy soil, scattered, 28 September 1968, *Weedon* 4789. WASHAKIE CO.: Worland, in a wet saline area, 16 July 1966, *Tresler* 322 (RM). According to Sherff (1937), the distribution of this species is from Maine, Quebec and North Dakota southward and southwestward to North Carolina, Tennessee, New Mexico and Utah. It has also been reported from eastern Colorado.

Artemisia annua L. KANSAS: DONIPHAN CO.: 1 mi n White Cloud, bank of Missouri River, willow thicket, several large colonies, 29 August 1970, *McGregor* 23467. This is the second known record for the state.

LITERATURE CITED

- BARKLEY, T. M. 1968. A Manual of the Flowering Plants of Kansas. The Kansas St. Univ. Endowment Assoc. Manhattan, Kansas.
- HARMS, V. L. 1965. Observations on the Breeding System of *Sida spinosa* (Malvaceae). *Trans. Kan. Acad. Sci.* 68(1): 123-24.
- HITCHCOCK, C. L., A. CRONQUIST, M. OWNBEY, J. W. THOMPSON. 1961. Vascular Plants of the Pacific Northwest. Part 3: Saxifragaceae to Ericaceae. Univ. of Washington Press, Seattle.
- KOMAROV, V. L. ed. 1964. Flora of the U.S.S.R. Vol. III. pp. 328-29. Pub. for Smithsonian Inst. and NSF by the Israel Program for Scientific Translations, Jerusalem.
- SHERFF, E. E. 1937. The Genus *Bidens*. *Field Mus. Nat. Hist. Bot. Ser.* 16: 251.

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